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AUTHOR Masten, William G.
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ABSTRACT

The paper reviews the literature on assessment of gifted minority students, focusing first on the importance of appropriate assessment methods, and then on research on specific approaches used to identify gifted Black, Hispanic (mainly Mexican-American), Asian/Pacific, and American Indian students. A discussion section cites five common elements in the research (use of intelligence tests with reduced bias, tests of creativity that have been shown to be unbiased for minorities, objective checklists, standardized achievement tests, and teacher rating scales). Only one paper mentioned leadership ability in gifted assessment and no reports tried to assess giftedness in terms of visual performance, arts ability, or psychomotor ability. It is concluded that awareness of problems in traditional assessment methods that penalize minorities and a broadening of the concept of giftedness are needed to assist in the stimulation, identification, and actualization of gifted students. (CL)

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Approaches to Identification of Gifted Minority Students

William G. Masten

Mississippi State University

William G. Masten, P.O. Box 449, Mississippi State, MS. 39762-0449.

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Abstract

The purpose of this paper is to summarize the literature on the assessment of gifted minority students. This is important because traditional methods are inadequate and disproportionately low numbers of minority children are placed into gifted programs. Measurement issues are outlined, published reports of research designed to identify gifted minority students are reviewed, and various aspects of assessment of gifted minority pupils are discussed. Recommendations included being aware of cultural diversity, using measurement techniques that do not penalize minority students, expanding our concept of giftedness, and studying the lives of gifted minorities.

Approaches to Identification of Gifted Minority Students

Research in California has determined that disproportionately low numbers of minority children have been placed into programs for the gifted (Mercer, 1973). There also is increased awareness that traditional methods, such as IQ tests, are inadequate for identification of gifted minority students (Torrance, 1977). For these reasons there is a growing body of literature describing techniques for minority gifted assessment. The purpose of this paper is to summarize the literature on the assessment of gifted minority students. Minority students is defined as students from the following groups American blacks, Hispanics, Asians or Pacific islanders, and American Indians.

Giftedness has been defined in terms of general intellectual ability, creative and productive thinking, specific academic aptitude, leadership ability, visual/performing arts ability, and psychomotor ability (Marland, 1972). From a measurement perspective some of the major issues that arise when minorities are evaluated for gifted placement have been summarized by Bruch and Curry (1978) and by Bruch (1975). These issues are: use of middle-class mainstream bases of measurement instruments; neglect of subcultural values, abilities, and knowledge in assessment instruments and procedures; use of almost exclusive training in the application of middle-class measurement instruments; belief that objective measurement is the only way to measure; problems of motivation and negative reactions to the examiner and the

tests; use of tests standardized with insufficient numbers of minorities; lack of knowledge about and identification of culturally valued talents; and problems of negative consequences on test performance caused by adverse environmental factors. In addition, after careful review of the literature, I believe there still is a very narrow perception of giftedness. Assessment of giftedness in minorities is frequently limited to intellectual level, academic performance, or creative productions. In future, the acceptance by educators and psychologists of the broad concepts of giftedness (Marland, 1972) may make possible the development of adequate assessment techniques with minority students. However, at present, published reports of attempts to assess gifted minority students are still limited.

One may ask why we should be concerned with assessment of minorities. Aside from the fact that traditional methods penalize minorities so that they are frequently underrepresented in gifted programs, minorities may be this country's largest untapped source of talent (Passow, 1972). From a humanitarian viewpoint, proper assessment of gifted minorities is important because "there is a great deal of giftedness among the culturally different and the waste or underuse of these resources is tragic" (Torrance, 1977, p. 3). Assessment of minorities is more difficult because misperceptions are great in number. These misperceptions include: the idea that a creative person can overcome any kind of adverse conditions; the effect that negative emotional reactions to socially disapproved behavior have on the

gifted; the idea that creativity may be obscured by immoral behavior; the fact that creativity may be difficult to spot due to the importance placed on verbal skills; the belief that creativity requires high intelligence; and the use of speeded tests (Torrance, 1964).

Many suggestions in gifted minority assessment can be found in the literature. Sullivan (1973) proposed the development of a new social and humanistic psychology which places importance on the interaction of an individual with his social environment. This would add an exciting new dimension to our present conception of giftedness. Since language is essential in assessment and minority children may not speak English or may speak non-standard English, identification strategies are needed that are not language dependent (Renzulli, 1970; Gonzalez, 1974). Some authors (Renzulli, 1970; Sullivan, 1973) believe gifted assessment needs to be a continuous process and not limited to a single test administration. A broader or multifaceted method of assessment that would evaluate a wider range of skills or talents is also seen as an important element that is not present in minority assessment (Sato, 1974; Renzulli, 1973; Renzulli, 1970). Other suggestions have included searching for the gifted in the classroom (Renzulli, 1970) and the use of peers in talent identification (Sullivan, 1973), but probably the most important advice for psychologists and educators is the use of tests that are not biased against minorities (Sullivan, 1973; Renzulli, 1970; Torrance, 1977). Finally, a six step plan to

assess gifted black children was introduced by Gay (1978). These steps included (1) getting a commitment to include larger numbers of black students in gifted programs, (2) screening the entire student population to select the top 1% and having teachers complete a gifted checklist on each student, (3) assigning weighted factors to evaluate various abilities, (4) after enrollment, asking the parents to complete a gifted behavior checklist, (5) administring to selected students the Structure of Intellect (SOI) (Guilford, 1950), the Torrance Test of Creative Thinking-Figural (Torrance, 1966), an auditory vocabulary test, and (6) rating students in a group problem-solving task on organizational, leadership, supportive, and distracting behaviors. While the plan was devised with black students in mind, it can be generalized to all minority groups.

Research on Gifted Minority Assessment Techniques

A variety of research reports have been published on the identification of gifted minority students. Some studies are for only one subgroup, while other papers report data on techniques that apply to more than one minority group. The System of Multicultural Pluralistic Assessment (SOMPA) (Mercer, 1978) is one method of assessment that applies to two minority groups. Originally developed to measure functioning and potential of Anglo, black, and Mexican-American students, its use has been expanded to include identification of giftedness in minorities. Mercer and Lewis (1978) selected children from the standardization sample of the SOMPA whose estimated learning potential (ELP) and Adaptive Behavior Inventory scores were in the top 2.5%. When these two groups were combined and identified as gifted, there were approximately equal percentages of children from both majority and minority groups. While this method is new and has not been sufficiently researched, the authors believe this approach to gifted assessment is encouraging.

Other research designed to identify gifted students from more than one minority group was reported by Meeker (1978), Ellison (1972), Fitz-Gibbon (1974), and Malone (1974). Meeker used the Structure of Intellect (SOI) (Guilford, 1950) and the Stanford-Binet (Terman & Merrill, 1960) to identify various dimensions of giftedness. She compared the gifted dimensions of Chicano and black boys and reported that Chicanos scored high in

cognition and convergent production while blacks scored low in cognition, evaluation, divergent production and high in memory. Both groups scored about equal in evaluation. Meeker suggests it is important to identify cognitive strengths rather than solely rely on IQ score.

Ellison (1972) attempted to identify gifted minority second grade students. The sample included 127 black, 85 Mexican-American, and 87 white students. All students were administered a battery of group and individual tests and teachers completed examiner and pupil rating scales for each student. Based on the results, Ellison concluded that examiner and pupil rating scales, grade point averages, and a visual motor integration test were able to select the highest percentage of gifted minority students and that the WISC Wechsler, 1949) and Wide Range Reading Achievement test (WRAT) (Jastak & Jastak 1965) can also be employed in assessment of gifted minority pupils.

Fitz-Gibbon (1974) also completed research designed to identify gifted minority students. Of a sample of about 400 eighth grade students 87% were black, 10% were Chicano, and 3% were classified as "other." The top 2% of all students were selected based on teacher nominations, on their scores on the California Test of Mental Maturity (CTMM) (Sullivan, Clark, & Tiegs, 1963), on the Raven Standard Progressive Matrices (SPM) (Raven, 1960), and on the California Achievement tests (CAT) (Tiegs & Clark, 1970). The 22 selected students were then administered the WISC (Wechsler, 1949). Based on WISC scores

nine students were identified as gifted. The gifted group included 7 blacks, 1 Chicano, and 1 student from the "other" category. Recommendations for future identification included: (1) screening all students with the SPM; (2) administering to the top 6% the Advanced Progressive Matrices (Adv.PM) (Raven, 1962); (3) identifying gifted students by administering the WISC to the students who score in the top half on the Adv.PM and to any student who scores in the top 2% on the SPM. The Adv.PM is given in order to differentiate students in the upper ability range and this makes the procedure more efficient. Those who score in the top 2% on the WISC are the gifted students for which programs should be developed.

To examine the ability of non-traditional measures to identify gifted minority kindergarten children, Malone (1974) used a behavioral rating of giftedness and one environmental screening scale. Results indicated that the selection method was differentially effective within and across ethnic groups, that no relationship was found between high scores on the environmental scale and the definition of giftedness employed, and that identification of gifted and non-gifted children based on behavioral characteristics, does not have to be limited by ethnic background.

The research of Hilliard (1976) and Bruch (1971) was aimed at identifying only gifted black students. Hilliard's research sought to identify gifted minority students not previously identified through non-verbal measures of creativity and

intelligence. The sample included 109 black students from a Brooklyn school. Subjects were grouped into four ability groups and administered the Goodenough-Harris Drawing Test (Goodenough & Harris, 1963), and the Torrance Tests of Creative Thinking-Figural Form A (Torrance, 1966). Results indicated that the measures used not only identified additional gifted black students but also differentiated those demonstrating intellectual promise from those showing creative abilities.

Bruch (1971) used the Abbreviated Binet for Disadvantaged (ABDA) to assess cognitive strengths of black students. This unique adaptation of the Binet was constructed by selecting the four items at each age level passed by a sample of 1,800 black students from grades one to six. Results indicated the following areas of cognitive strength for black children visual and auditory figural content, memory operations, convergent production, units products, class products, and system products. While these areas can be used as a basis to identify gifted black students, the ABDA must be used as a clinical rather than a statistical analysis of strengths.

For Hispanic students, it appears few research reports exist and all seem to concentrate on Mexican-American students. To develop a method for the identification of gifted Mexican-American students based on their potential to produce high creative and intellectual contributions, Chambers, Barron, and Sprecher (1980) used the IPAT Culture Fair Intelligence Test (Catell, 1958), the Wallach-Kogan Tests of Creativity (Wallach &

Kogan, 1965), the Barron Symbol Equivalence Test (Barron, 1976), teacher ratings, and a personal adjective checklist. The sample included 298 Chicano students in the third, fourth, and sixth grades. The children were from two California public school districts. Ethnicitity was determined by Spanish surname. Results showed that most of the children were from homes where Spanish was the dominant language and where the fathers were unskilled workers. Few differences were found in test scores between rural and urban subjects, and males and females showed very consistent test results. The test's ability to predict high creative and intellectual productions increased from the third to the fifth grade, but declined in the sixth grade. This decline was attributed to the onset of puberty. Socioeconomic status and predominent language at home had little effect on creative or intellectual productions. The authors concluded the methods used are an inexpensive and useful procedure to identify gifted Chicano students.

Bernal has reported his research on procedures designed for the identification of gifted Mexican-American children (Bernal & Reyna, 1975); Bernal, 1974). The methods used included (1) an adjectival rating scale and a behavioral rating scale based on Chicano community perceptions of giftedness, (2) the Wechsler Intelligence Scale for Children (WISC) (Wechsler, 1949), (3) the Cartoon Conservation Scales (DeAvila & Havassy, 1975), and (4) the Torrance Test of Creative Thinking (Torrance, 1966). One hundred eight bilingual students were tested and 54 of the

subjects' parents were interviewed.

The results indicated that the a gifted Chicano child, from a community viewpoint should (A) have verve and style, (B) show a real joy in his talents, (C) practice his talents often to the exclusion of friends, (D) be intelligent, (E) use common sense, (F) be inquisitive, (G) not be hesitant, (H) be sensitive, (I) be restless, (J) be more responsible, and (K) have social relatability skills. Through a rating system completed by a four member jury, students were identifed as gifted. Analysis found nine items on the behavioral scale which identified gifted from non-gifted pupils. Gifted students engage in these behaviors to a greater degree than the non-gifted students. Bernal believes that, while preliminary, the results can lead to better methods of identifying the gifted Chicano child. Based on past research, Bernal (1978) advocates using bilingual language proficiency scales to evaluate gifted children who are Spanish dominant when they enter school. After complete language assessment in both Spanish and English, those children who demonstrate unusally high or sophisticated language productive competency in their dominant language can be called potentially gifted. Later, those students who demonstrate rapid growth in English syntax, functional English language use, early onset of errors, and creative constructions should be diagnosed as gifted. Bernal recommends the use of three language scales but does not present any research on the use of this method.

Mercer (1977) has also written about using ths SOMPA to

identify gifted Mexican-American children. She reported 22 Chicano children from the SOMPA standardization sample had ELP scores of 125 or higher (the top 2.5%) and reports two case studies of gifted children that probably would not have been identified through traditional methods. For the American Indian and Asian/Pacific minority groups not much research exists on specific methods of assessment. To identify gifted students from seven low SES Asian schools in the Chinatown area of New York City, Chen and Goon (1976) used three qualifications. First, students should score 2 years above their grade level on reading and 1 ½ years above their grade level on math on the Metropolitan Achievement Test (Durost & Bixler, 1970). Second, students should demonstrate initiative, enthusiasm, willingness to work, reliability, industry, regular attendance, and a capacity for sustained work. Third, students must be in good health and have no emotional instability. Teachers and guidance counselors were interviewed with a questionnaire and the results along with the standardized tests scores were used to determine the gifted students. Results indicated that from the 7 schools 39% to 100% of the identified gifted students were Asian. The incidence of Asian gifted students ranged from 12% to 27% which was higher than expected. When Asian were compared to non-Asian gifted, the Asian students seemed to have better relations with others, work more diligently, use humor and sarcasm without being vicious, and demonstrate strength in math. On verbal scores the Asian students were equal to or higher than non-Asian gifted

students.

Meeker (1978) has reported results of research conducted to identify gifted Navajo students using the SOI. Of a sample of 440 students 67 were identified who scored 3 years above their grade level on a minimum of 5 SOI subtests. Meeker developed a screening device from these data that can be administered to a whole class by a teacher.

Conclusion and Discussion

Some of the common elements in this body of research were identification of gifted minority students through (1) intelligence tests with reduced bias, (2) tests of creativity that have been shown not to be biased for minorities, (3) objective checklists, (4) standardized achievement tests and (5) teacher rating scales. Few authors have used community bases ideas on the nature of giftedness in identification. Unfortunately, many of the issues cited by Bruch (1975) have yet to be adequately resolved. The nature of gifted assessment is still limited, in most cases, to creativity, intelligence, and achievement on standarized tests. Only one paper mentioned leadership ability in gifted assessment and no reports tried to assess giftedness in terms of visual/performing arts ability, or psychomotor ability. However, this problem is not unique to minority gifted assessment. Perhaps some recently developed scales by Khatena (1981) can fill this void. It must also be pointed out that some research goes beyond the elements outlined by Marland (1972). This reaching beyond traditional gifted definitions will assist in the development of a broader conception of giftedness and in time help more students to develop their talents.

Throughout the literature there is a common, although often unstated, assumption that an undertanding and awareness of cultural diversity will assist in the identification of gifted minority students. The point is made explicit by the research

of Bernal (Bernal, 1974; Bernal & Reyna, 1975) and by Mercer (1978). Both of these researchers use socio-cultural variables in their assessment techniques.

Regarding the feasibility of the various systems, most seem fairly traditional and some, especially those that include an individually administered intelligence test, may be very expensive and consequently never applied in schools. One very economical method seems to be the one proposed by Fitz-Gibbon (1974). While it is limited to intelligence tests, the idea of a school screening with a teacher administering tests to the entire class holds promise. This method cuts down on expense because the training needed to administer the test is not lengthy and the test can be given during a class period. Finally, it appears that no research has studied the lives of minorities that were successful, productive, artistic, highly intlligent, or gifted in psychomotor abilities for the purposes of identifying those with promise. It also seems that longitudinal studies of gifted minorities have not been completed. Study in both of these areas may lead to more adequate identification of gifted students who are from black, Hispanic, American Indian, or Asian/ Pacific backgrounds.

Awareness of the problems inherent in traditional methods that penalize minorities and the reduction of our limited concept of giftedness will certainly assist in the stimulation, identification, and actualization of these gifted students. Stimulating the minority gifted has important implications for

their learning, mental health, and future development. However, if they are not identified, it is very probable they will never be properly stimulated to achieve their full potentials.

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